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UNIT	TED STATES PATENT A	AND TRADEMARK OFFICE	UNITED STATES DEPAR United States Patent and Address: COMMISSIONER F P.O. Box 1450 Alexandria, Virginia 223 www.nspto.gov	Trademark Office OR PATENTS
APPLICATION NO TRA	DEMAPILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,917	01/25/2006	Takashi Miyoshi	OOCL2672004OP5181	7766
	7590 08/21/2009			
Straub & Pokot			EXAM	INER
Building B 2nd			CAMBY, RI	CHARD M
620 Tinton Ave Tinton Falls, N			ART UNIT	PAPER NUMBER
			3661	-
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			MAIL DATE	DELIVERY MODE
			08/21/2009	PAPER

.Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summer	10/565,917	MIYOSHI ET AL.
Office Action Summary	Examiner	Art Unit
	Richard M. Camby	3661
 The MAILING DATE of this communication app Period for Reply 	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I. ely filed the mailing date of this communication. O (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on		
<u> </u>	-· action is non-final.	
3) Since this application is in condition for allowan		secution as to the merits is
closed in accordance with the practice under E		
Disposition of Claims	, , , , , , , , , , , , , , , , , , , ,	
4) Claim(s) 1-19 is/are pending in the application.		
4a) Of the above claim(s) is/are withdraw		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-19</u> is/are rejected.		
7) Claim(s) is/are objected to.	•	
8) Claim(s) are subject to restriction and/or	election requirement.	
Application Papers		
9) The specification is objected to by the Examiner	•	
10) The drawing(s) filed on is/are: a) acce	epted or b) objected to by the E	Examiner.
Applicant may not request that any objection to the o	frawing(s) be held in abeyance. See	e 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction	on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.
Priority under 35 U.S.C. § 119		
12)⊠ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f).
a)⊠ All b) Some * c) None of:		• • • • • • • • • • • • • • • • • • • •
1. Certified copies of the priority documents	have been received.	
2. Certified copies of the priority documents	have been received in Application	on No
Copies of the certified copies of the priori	ity documents have been receive	ed in this National Stage
application from the International Bureau		
* See the attached detailed Office action for a list of	of the certified copies not receive	d.
·		•
Attachment(s)	_	
1) X Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da	(PTO-413)
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal Page	
Paper No(s)/Mail Date	6) Other:	

Art Unit: 3661

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 7-81604 in view of JP 11-144185 and JP 2001-76128.

The JP reference '604 discloses a vehicle equipped with a automatic steering system that uses a CCD camera to capture points in time as images to convert them into coordinate values to indicate the location of the lanes of traffic as described in paragraphs 8, 12-14, 28 and 58. The JP '185 reference discloses an automatic steering system that calculates an immediate future route that the vehicle needs to travel to continue running safely in the lane without hitting any other vehicles. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of JP '604 with the safe running calculation of JP '185 in order to have less accidents. The JP ' 128 discloses representing a road from a zone that is not found on the road and filled with traffic obstacles by comprehending associated texture data. It uses a stereo camera for capturing 3D data. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the modified device of JP '604 with a 3D camera and zone detection as taught by JP '128 in order to have better resolution.

Art Unit: 3661

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard M. Camby whose telephone number is (571) 272-6958. The examiner can normally be reached on Tues-Fri 9:00 a.m.-7:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard M. Camby/
Primary Examiner, Art Unit 3661

Application/Control No. Applicant(s)/Patent Under Reexamination 10/565,917 MIYOSHI ET AL. Notice of References Cited Examiner Art Unit Page 1 of 1 Richard M. Camby 3661 **U.S. PATENT DOCUMENTS** Document Number Date Name Classification Country Code-Number-Kind Code MM-YYYY US-7,510,038 03-2009 Kaufmann et al. 180/169 US-7,302,321 11-2007 В Suzuki et al. 701/23 С US-6,772,062 08-2004 Lasky et al. 701/207 D ÚS-US-Ε US-F US-G US-Н US-1 US-J US-Κ US-L US-М FOREIGN PATENT DOCUMENTS **Document Number** Date Country Classification Name Country Code-Number-Kind Code MM-YYYY Ν 0 ₽ Q R s Т **NON-PATENT DOCUMENTS** Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) W Х

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

(modified PTO/SB/08A) U.S. Department of Commerce 10/565,917 Application Number: Patent and Trademark Office Filing Date: January 25, 2006 First Named Inventor: Takashi MIYOSHI INFORMATION DISCLOSURE Group Art Unit: 3661 STATEMENT BY APPLICANT

Not yet assigned

OOCL-267 (2004OP518-1)

Examiner Name:

Attorney Docket No.:

(use as many sheets as necessary) 1

of

U.S. Patent Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	. Pages, Columns, Lines
			where relevant Passages or Figures appear
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Examiner Initials*	Cite No.1	Foreign Patent Document Office 3 Number 4	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	, Te
	JР	11-144185	05-28-1999	HONDA MOTOR CO., LTD.		Х
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		OTHER REFERENCES - NON-PATENT LITERATURE DOCUMENTS	
Examiner Initials* :	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume, issue number(s), publisher, country, where published, source	T
:	JQ	Japanese Office Action for application no. 2003-203494, dated February 6, 2007 (2	
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Examiner	/Richard Camby/ (08/18/2009)	Date	08/18/2009
Signature	, , , , , , , , , , , , , , , , , , ,	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language translation is attached.

(modified PTO/SB/08A)

U.S. Department of Commerce Patent and Trademark Office

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

10/565,917 January 25, 2006 First Named Inventor: Takashi MIYOSHI

Group Art Unit: 3661

Examiner Name:

Not yet assigned

Sheet of Attorney Docket No.: OOCL-267 (2004OP518-1)

			U.S. I	PATENT DOCUMENTS	
Examiner Initials*	Cite No.	U.S. Patent Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines where relevant Passages or Figures appear
	AR	US 2003/069695 A1	04-10-2003	MASAYUKI	
	 				
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Examiner Initials*	Cite No.	Foreign Patent Document Office 3 Number 4	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	To
	AS	EP 0 795 700 A2	09-17-1997	TOYOTA MOTOR CO LTD		
	AT	WO 03/001471 A	01-03-2003	DAIMLER CHRYSLER AG		
	AU	EP 1 288 072 A	03-05-2003	AISIN SEIKI		
	1					

		OTHER REFERENCES - NON-PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume, issue number(s), publisher, country, where published, source	172
	AV	Bertozzi M., et al., "Sensing of Automotive Environments Using Stereo Vision," <u>International Symposium of Automotive Technology and Automation</u> , pp. 187-193 (June 16, 1997).	
	AW	Franke U., et al., "Real-time Stereo Vision for Urban Traffic Scene Understanding," <u>Proceedings of the IEEE Intelligent Vehicles Symposium 2000</u> , pp. 273-278 (October 2000).	
	AX	Supplementary European Search Report, to European Patent Application No. 04770848.2-2215 PCT/JP2004010338, dated August 20, 2007 (4 pgs.).	
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Examiner Signature /Richard Camby/ (08/18/2009)	Date Considered	08/18/2009
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language translation is attached.

(modified PTO/SB/08A)

U.S. Department of Commerce Patent and Trademark Office

Complete if Known

JON DISCLOSURE BY APPLICANT

Application Number: 10/565,917 Filing Date:

January 25, 2006

First Named Inventor: Takashi MIYOSHI Group Art Unit: Not yet assigned **Examiner Name:** Not yet assigned

of Attorney Docket No.: OOCL-267 (2004OP518-1)

(SD)			U.S. I	PATENT DOCUMENTS	
Examiner Initials*	Cite No.1	U.S. Patent Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines where relevant Passages or Figures appear
	AA	5,530,420	06-25-1996	TSUCHIYA et al.	
	AB	6,169,940	01-02-2001	ЛТSUKATA et al.	
					
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Examiner Initials*	Cite No. ¹	Foreign Patent Document Office 3 Number4	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	14
	AC	JP-06-266828	09-22-1994	FUJI HEAVY IND. LTD.		
	AD	JP-07-065294	03-10-1995	MITSUBISHI ELECTRIC CORP.		
	AE	JP-07-081604	03-28-1995	HONDA MOTOR CO. LTD.		
	AF.	JP-11-144185	05-28-1995			
	AG	JP-7-192199	07-28-1995			
	AH	JP-08-221698	08-30-1996	MITSUBISHI ELECTRIC CORP.		
	AI	JP-10-283593	10-23-1998	FUJI HEAVY IND. LTD.		
	AJ	JP-2000-339596	12-08-2000	FUJI HEAVY IND. LTD.		
	AK	JP-2001-076128	03-23-2001	TOSHIBA CORP.	•	
	AL	JP-2001-109519	04-20-2001	KOMATSU LTD.		
	AM	JP-2001-273597	10-05-2001	MAZDA MOTOR CORP.	•	
	AN	JP-2003-121543	04-23-2003	NISSAN MOTOR CO. LTD.		
	AO	JP-2004-053278	02-19-2004	NISSAN MOTOR CO. LTD.		

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ERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /RC/

¹ Unique citation designation number. 2 See attached kinds of U.S. Patent Documents. 3 Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the Indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16, if possible. 6 Applicant is to place a check mark here if English language translation is attached ALL REF

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number: Filing Date: First Named Inventor: Group Art Unit: Examiner Name:	10/565,917 January 25, 2006 Takashi MIYOSHI 3661 Not yet assigned			
Sheet	1	of	1	Attorney Docket No.:	OOCL-267 (2004OP518-1)	

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	AY	European Communication for European Patent Application No. 04 770 848.2-2215, dated September 2, 2008 (5 pgs.)				
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Examiner		Date	08/18/2009	
Signature	/Richard Camby/ (08/18/2009)		00/10/2009	
Signature	Triidiara Gallibyi (GOI TO/EGGG)	Considered		

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¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language translation is attached.